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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/688,517

10/17/2003

Sei-won Hong

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EXAMINER

KIM, CHONG R

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

11/14/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/688,517

Applicant(s)

HONG, SEI-WON

Examiner

Charles Kim

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 7-24 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment and Arguments***

1. Applicant's amendment filed on August 30, 2007 has been entered and made of record.
2. Applicant's arguments have been fully considered, but they are not deemed to be persuasive for at least the following reasons.

Applicant argues (page 8) that their claimed invention (claims 7-8 and 19-24) differs from the prior art because Safai and Cok do not disclose or suggest expanding/magnifying the image during the retouch operation. The Examiner disagrees. Safai explains that a ZOOM operation can be performed to zoom in, i.e., expand or magnify, on a portion of an image that is displayed (col. 10, ll. 63-65). Safai further discloses retouching the captured digital image (col. 7, ll. 31-50). Therefore, Safai's discloser would have clearly suggested to one of ordinary skill to expand/magnify the image during the retouch operation.

Applicant further argues (page 6) that the Office Action "does not provide any detail as to where the structural features recited in claim 9 (i.e., a region recognition unit and a region retouch unit) can be found in Safai or Cok." The Examiner responds by pointing out that figure 2 of Safai clearly illustrates the structural features recited in claim 9, particularly the region recognition unit and a region retouch unit (See elements 210, 232). Therefore, the Office maintains the position that Safai and Cok disclose the features recited in claims 9-18.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7, 19, 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 7, the phrase “substantially similar” in lines 11-12 renders the claim indefinite because it is unclear what the scope of the phrase is. A similar rejection applies to claim 22. Appropriate corrections are required.

In regards to claim 19, the phrase “substantially surrounding” in line 7 renders the claim indefinite because it is unclear what the scope of the phrase is. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Safai (6,167,469) and Cok (5,555,194).

In regards to claim 7, Safai discloses a method for retouching a photographed image using a digital camera that includes an image storing medium and a display unit (figure 2), the photographed image being stored in the image storing medium and displayed on the display unit, the method comprising:

(a) determining if a user has formed a magnifying window on a portion of the image being displayed on the display unit (col. 10, ll. 60-67);

(b) expanding the portion of the image in the magnifying window, the portion of the image defining an expanded image region (col. 10, ll. 60-67).

Safai further discloses retouching the captured digital image for an impurity (col. 7, ll. 31-50), but does not explicitly disclose the details of the retouching process. However, Cok discloses the following steps:

(c) determining if the user has identified a detailed retouch region, the detailed retouch region enclosing the impurity (blemish) to be retouched (col. 1, ll. 22-56);

(d) forming a filter window (brush shape) having a size that is substantially similar to a size of the detailed retouch region in the expanded image region (col. 1, ll. 22-56);

(e) disposing the filter window on an image region having color information similar to that of the detailed retouch region (col. 1, ll. 22-56);

(f) copying the image region on which the filter window is disposed (col. 1, ll. 22-56);

(g) disposing the filter window having color information of the copied image region on the detailed retouch region (col. 1, ll. 22-56); and

(h) substituting the color information of the detailed retouch region on which the filter window is disposed with the color information of the copied image region (col. 1, ll. 22-56).

Safai and Cok are combinable because they are both concerned with retouching digital images. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Safai's retouching process to include the steps taught by Cok. The reason for doing so would have been to enhance the captured image by removing any blemishes, undesired marks on skin, or undesired artifacts due to dust or scratches. Therefore, it would have been obvious to combine Safai with Cok to obtain the invention as specified in claim 7.

In regards to claim 8, Cok further discloses after the substituting step, recognizing a peripheral image region containing the substituted detailed retouch region and blurring the recognized peripheral image region (col. 2, ll. 23-30).

In regards to claim 9, Safai discloses a digital camera (figure 1) which has onboard image editing tools for performing editing operations on captured images such as retouching (figure 3, col. 7, lines 31 – 50, and col. 7, line 66 – col. 8, line 8). Safai does not disclose what imaging editing tools are provided, but as Safai clearly is running on the Windows CE operating system (see figure 3) any program that could be made for a Windows computer would work on Safai. Safai does not teach of the particular retouching features, only that the “user of the digital camera [can] edit, retouch, or alter one or more stored pictures or images while they are stored in the camera”. Using any typical photo-editing tool would therefore be obvious with regards to Safai. Cok teaches (col. 1, line 21 – col. 2, line 30) of the typical approach for retouching images, which is often referred to as cloning or “rubber stamping” (from Photoshop).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to use the retouching techniques taught by Cok in the digital camera disclosed by Safai. Safai calls for retouching and Cok teaches the most common way of doing this. Using a

cloning approach over a more complicated retouching technique will require less processing power, as cameras are not as powerful as personal computers processing power is an important consideration when selecting algorithms.

In regards to claim 10, The apparatus of claim 9, wherein the region retouch unit blurs the recognized image region and outputs the blurred image region (Cok, col. 2, lines 23 – 30).

In regards to claim 11, The apparatus of claim 9, wherein the region retouch unit comprises: a filter window forming unit for forming a first filter window having the same size as the recognized image region and outputting the formed first filter window (Cok, col. 1, lines 21 – 67); a filter window moving unit for moving the first filter window input from the filter window forming unit on a screen of the digital camera and outputting the moved result (Cok, col. 1, lines 21 – 67); a region copying unit for copying the image region on which the first filter window is disposed in response to receiving of the moved result of the first filter window, and outputting the copied image region (Cok, col. 1, lines 21 – 67); and a color information substituting unit for substituting the color information of the recognized image region with that of the copied image region in response to receiving of the moved result of the first filter window including the copied image region from the filter window moving unit, and outputting the substituted image region (Cok, col. 1, lines 21 – 67).

In regards to claim 12, The apparatus of claim 11, wherein the filter window forming unit forms windows having several selective sizes (Cok, col. 1, lines 49 – 55).

In regards to claim 13, The apparatus of claim 11, wherein the region retouch unit further comprises: a peripheral region recognizing unit for recognizing a peripheral image region including the substituted image region in response to receiving of the substituted image region

Art Unit: 2624

from the color information substituting unit, and outputting the recognized peripheral image region (Cok, col. 2, lines 22 – 30: Cok needs to identify the boundary region in order to blur it.); and a peripheral region blurring unit for blurring the recognized peripheral image region input from the peripheral region recognizing unit, and outputting the blurred peripheral image region (Cok, col. 2, lines 22 – 30).

In regards to claim 14, The apparatus of claim 9 further comprising a region expanding unit for expanding the recognized image region input from the region recognition unit and outputting the expanded image region, wherein the region retouch unit retouches the expanded image region input from the region expanding unit and outputs the retouched image region (Cok, col. 2, lines 22 – 30: By identifying the boundary region of retouch area Cok is finding an expanded image area.).

In regards to claim 15, The apparatus of claim 14, wherein the region retouch unit comprises: a detailed retouch region recognizing unit for recognizing the detailed retouch region in the expanded image region and outputting the recognized detailed retouch region (Cok, col. 1, lines 49 – 55: Cok identifies the area to be retouched); and a detailed retouch region blurring unit for blurring the detailed retouch region input from the detailed retouch region recognizing unit and outputting the blurred detailed retouch region (Cok, col. 2, lines 22 – 30).

In regards to claims 16 – 18, claims 16 – 18 are rejected for the same reasons as claims 11 – 13. The argument analogous to that presented above for claims 11 – 13 is applicable to claims 16 – 18.

In regards to claim 19, see the rejection of at least claim 7 above.



In regards to claim 20, Safai discloses storing the image on the image storing medium after the retouching process (col. 6, ll. 1-4).

In regards to claim 21, see the rejection of at least claim 8 above.

In regards to claim 22 as best understood, Cok further discloses determining a first configuration of the first window and configuring on the display unit the second window which has a second configuration being substantially similar to the first configuration (col. 1, ll. 22-56).

Referring to claim 23, Cok further discloses displaying a plurality of second windows on the display unit, each second window of the plurality of second windows having a different configuration, and detecting user-selection of one second window from the plurality of second windows (col. 1, ll. 49-52).

Referring to claim 24, Cok further discloses copying information of pixels constituting the location; and replacing the first window with the information from the copying step (col. 1, ll. 22-56).

### *Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

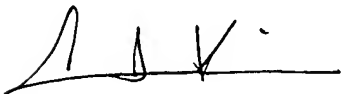
Art Unit: 2624

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 571-272-7421. The examiner can normally be reached on Mon thru Thurs 8:30am to 6pm and alternating Fri 9:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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November 10, 2007



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